APPENDIX

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PRESERVATION SUPPLEMENT 72-2

The W. J. Barrow Research Laboratory of Richmond, Va., was established in 1961 by the late William J. Barrow with assistance from the Council on Library Resources (CLR) for the purpose of continuing the research he began in 1957 on the Council's behalf in his restoration shop at the Virginia State Library. The laboratory is devoted exclusively to investigations related to the preservation of library materials. Its research findings have been reported principally in the monographic series, *Permanence/Durability of the Book*, of which six numbers have been issued, but to a lesser extent in notes and articles in the technical press. Following Mr. Barrow's death in 1967, Dr. Robert N. DuPuis, previously Vice President for Research of General Foods Corporation, served as part-time Director of the Laboratory. In August 1971, Dr. Forestier Walker, previously Director of Research of the Huyck Corporation was appointed full-time Director, and Dr. DuPuis became the Council's representative to the Laboratory. The Laboratory continues to receive support for its basic program, on a biennial schedule, from the Council, but may take other commissions. One of its current priority investigations, the revision of specifications for permanent/durable book paper (uncoated), is cosponsored by the Council and the Library of Congress.

The Laboratory's program for the current biennium (August 1971-July 1973) covers the following investigations (unless otherwise noted, all projects are sponsored by the Council):

I. Projects carried forward from previous biennia

1. An investigation of the characteristics of book papers, from 1507 to 1970, will include the preparation and publication of a report of the investigation, planned for completion during 1972.

2. Data previously gathered on the effect of storage temperature upon paper permanence is to be analyzed and a report prepared for publication. The report will include a mathematical analysis of the data, information on the effect of light, air, and other complicating factors and some characteristics of heat-aging pursued to destruction.

3. A study of the effect of storage humidity upon paper permanence is also included in this series of projects.

II. Projects carried forward form 1969/71

1. The deacidification of book materials by gaseous diffusion is now in progress.

2. The revision of specifications for permanent/durable (uncoated) book paper is cosponsored by the Council and the Library of Congress, and is scheduled for completion in 1972.

3. A study of testing methods is also underway, and will encompass investigation into a non-destructive method for measurement of surface pH of paper, inquiry into the applications of infra-red spectrometry to paper analysis, and the refinement of the MIT paper folding endurance test.

4. A report covering work completed during the previous biennium, and undergoing refinement, is now in preparation and is expected to be completed in 1972. This phase of the research project involved feasibility tests concerning methods for strengthening weak papers by polymer depositions, devising methods of bleaching fire-damaged paper and damaged paper, and inquiry into the suitability of various films for the protection of documents.

Preparations have begun or are about to begin on projects planned for implementation within the current biennium, and will include the writing of specifications for permanent/durable book paper, (other than uncoated), and the establishment of the effects of natural aging of paper.

Other phases of this segment of the research effort will cover the effect on paper aging of relative humidity at room temperature, the evaluation and improvement of certain bookbinding materials, and an investigation into the permanence and durability of vegetable parchment.